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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/533,966	06/13/2006	Ville Kettunen	FRG-16076	6098
40854	7590	05/25/2010		
RANKIN, HILL & CLARK LLP 38210 GLENN AVENUE WILLOUGHBY, OH 44094-7808			EXAMINER SNYDER, ZACHARY J	
			ART UNIT	PAPER NUMBER
			2889	
			NOTIFICATION DATE	DELIVERY MODE
			05/25/2010	ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

40854@rankinhill.com  
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<b>Office Action Summary</b>	<b>Application No.</b> 10/533,966	<b>Applicant(s)</b> KETTUNEN ET AL.	
	<b>Examiner</b> Zachary Snyder	<b>Art Unit</b> 2889	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 12 February 2010.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 20-27 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 20-27 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                    | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)         | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                          |

**DETAILED ACTION**

***Response to Amendment***

Receipt is acknowledged of applicant's amendment filed 2/12/2010. Claims 20-27 are pending and an action on the merits is as follows.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 20-27 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent 5,698,941 to Jaskie et al.

In regard to claim 20, Jaskie discloses in figure 19 an optical element comprising at least one of diffractive type or refractive type micro-optical structures on at least one of its surfaces (light refracting groove 920, COL. 9, LINE 19), wherein

said surface comprises a plurality of independent sections wherein at least two of said sections have micro-optical structures on the section's surface that are different from one another (region 904 has two sets of grooves 920 with different shapes, figure 19).

In regard to claim 21, Jaskie discloses the limitations of claim 20 and that the micro-optical structures of the micro-optical element are designed according to the position, size and

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shape of the one or more electroluminescent elements, and output light distribution of the one or more electroluminescent elements to be used in conjunction with the optical element (shown in figure 19 that light emitting elements 810, 808, and 814 are all taken into consideration regarding the placement of grooves 920, the light distribution of light 818 is adjusted by the micro-optical elements).

In regard to claim 22, Jaskie discloses the limitations of claim 20 and that the different sections comprise different micro-optical structures present in a single at least partially transparent layer (shown in figure 19 that the different micro-optical structures in section 904 are all provided in layer 900).

In regard to claim 23, Jaskie discloses the limitations of claim 20 and that in each section comprising micro-optical structures, the micro-optical structures comprise features having a characteristic profile dimensions of between 0.5 micrometers and 200 micrometers (the width of the light emitting regions is on the order of 150 micrometers, COL. 5, LINES 12-13, Grooves 920 are formed so that they overlap light-emitting regions 814, COL. 10, LINES 10-15).

In regard to claim 24, Jaskie discloses the limitations of claim 20 and that independent section each have an individual optical function (shown in figure 19 that light 816 is affected differently by each groove 920).

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In regard to claim 25, Jaskie discloses in figure 5 a method for manufacturing an optical element comprising the steps of:

providing an at least partially transparent material with a surface (figure 19, layer 900),  
and

adding to said surface a structure serving as micro-optical element for shaping and/or collimating light (grooves 920, shown in figure 19 to be shaping light 818), wherein said structure is shaped such that said micro-optical element comprises a plurality of independent sections wherein at least two of said sections have micro-optical structures added to their surfaces that are different from one another (section 904 having grooves 920, shown figure 19, have different affects on light 816).

In regard to claim 26, Jaskie discloses the limitations of claim 25 and that the method further comprises the step of embossing in said surface a micro-structure serving as said micro-optical element (grooves 920 are formed by embossing, COL. 10, LINE 1)

In regard to claim 27, Jaskie discloses the limitations of claim 25 and that the method further comprises manufacturing the different sections by manufacturing different micro-optical structures in a single at least partially transparent layer (shown in figure 19 that the different micro-optical structures in section 904 are all provided in layer 900).

***Conclusion***

Applicant's amendment on 2/12/2010 necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Zachary Snyder whose telephone number is (571)270-5291. The examiner can normally be reached on Monday through Thursday, 7:30AM to 6PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Toan Ton can be reached on (571)272-2303. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Toan Ton/  
Supervisory Patent Examiner, Art Unit 2889

/Zachary Snyder/  
Examiner, Art Unit 2889